REMARKS

I. Status of the Application

Claims 20, 21, 23-37, 39 and 40 are pending in this application. In the April 3, 2008 office action, the Examiner:

A. Rejected claim 30 under 35 U.S.C. § 112 as failing to comply with the written description requirement;

B. Rejected claims 34-36 under 35 U.S.C. § 102(e) as being anticipated by US 7,042,863 to Morris;

C. Rejected claims 20, 23, 25-26, 31, 37 and 39-40 under 35 U.S.C. § 103(a) as being unpatentable over Morris in view of US Pub 2004/0147267 to Hill et al.; and

D. Rejected claims 21 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Morris in view of Hill further in view of US Pub 2003/0103487 to Kim et al.;

E. Rejected claims 27-29 and 32 under 35 U.S.C. § 103(a) as being unpatentable over Morris in view of Hill and further in view of Official Notice;

F. Rejected claim 33 under 35 U.S.C. § 103(a) as being unpatentable over Morris in view of Hill and further in view of US 7,292,588 to Milley et al.; and

G. Objected to the specification due to informalities.

In this response, applicants have amended claims 20 and 34, and cancelled claim 25. Applicants respectfully traverse the rejection of the claims and request reconsideration in light of the foregoing amendments and following remarks.

II. Objection to the Specification

The specification was objected for informalities. In particular, the specification was objected to for lack of section headings. However, Applicants submit that the specification was amended to include headings via a preliminary amendment filed February 27, 2004. Accordingly, it is respectfully submitted that the objection to the specification for informalities is in error and should be withdrawn.

III. 112 Rejections

Claim 30 was rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. In particular, claim 30 was rejected because, according to the Examiner, the term "zero crossings" as claimed in claim 30 is not explained in the specification to the extent necessary to inform a person having ordinary skill in the art of a reasonable definition of the term.

However, Applicants submit that the term "zero crossings" is a term of art with a meaning that is commonly known in the art of electronics, data transmission, and mathematics, and that a person of ordinary skill in the art would understand what "zero crossings" means with reference to claim 30 and the specification. The term "zero crossing" is well known within the art of electronics and, in particular, data transmission. Wikipedia even includes an entry for "zero crossing" which states, *inter alia*, that "zero crossing is a commonly used term in electronics, mathematics, and image processing. In mathematical terms, 'zero crossing' basically means the changing of sign (e.g. from positive to negative), that is represented with a crossing of the axis (zero-value) in a graph of a particular function."

Accordingly, it is submitted that the meaning of the term "zero crossings" is well known to one of ordinary skill in the art. "What is conventional or well known to one of ordinary skill in the art need not be disclosed in detail." See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d at 1384, 231 USPQ at 94. Therefore, it is respectfully submitted that the 35 U.S.C. § 112 rejection of claim 30 as failing to comply with the written description requirement should be withdrawn.

IV. Prior Art Rejections

Claims 20, 21, 23-37, 39 and 40 were as being anticipated or rendered obvious by one or more of the following references: Morris, Hill, Kim, and Milley. Independent claims 20 and 34 have been amended to include subject matter from cancelled claim 25. For the reasons discussed below, none of the prior art references, either alone or in combination, teach, show or suggest each and every limitation of claims 20, 21, 23-37, 39 and 40, as amended.

A. Claim 20

Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Morris in view of Hill. Claim 20 has been amended to include the subject matter from cancelled claim 25. Accordingly, claim 20 now includes the limitation of "determining a synchronization parameter for synchronization of the second communication channel, the synchronization parameter defining a phase offset for data interchange between the master subscriber and each of the first and second slave subscribers via, respectively, the first communication channel and the second communication channel." For the reasons discussed below, neither Morris nor

Hill, either alone or in combination, teaches, shows or suggests such a limitation.

Morris discloses a Bluetooth system having so-called piconets. Each piconet according to Morris includes a master unit and at least one slave unit. Each slave unit within the respective piconet is polled by the master unit immediately prior to transmitting information. According to Morris, each slave unit is given the opportunity to transmit information. The master units may sequentially poll the individual slave units in the piconet. In principle, the master unit is free to poll slave units in any sequence.

Hill describes the determination of information regarding a mobile terminal's movement within a wireless network such as a Bluetooth system. According to the teachings of Hill, the master unit of a Bluetooth piconet controls all traffic in the piconet for ACL (Asynchronous Connectionless) links. Every slave unit is addressed in a specific order and polling scheme. Slave units can only transmit in response to an address from the master unit in the preceding time slot. The master unit of the piconet has a system clock and identity that are central to the operation of a frequency hopping. Bluetooth uses such a frequency hopping technique to avoid interference between RF (radio frequency) transmissions. In the frequency hopping technique, the frequency band is divided into a number of hop channels. The hop from one channel to another is affected in a pseudo-random order. According to Hill, it is possible that multiple piconets of the Bluetooth system cover the same area. In such a case, a Bluetooth unit can participate in two or more overlaying piconets. To participate on the proper channel of the respective piconet, the Bluetooth unit should use the associated address and proper clock offset of the master unit of the respective piconet to obtain its correct phase. A Bluetooth unit can act as a slave unit in several piconets, but only as a master unit in a

single piconet. Two piconets having the same master unit are synchronized and constitute one and the same piconet. Hill discusses the so-called roaming of a Bluetooth unit. During such a roaming, a so-called "hand-off" of the moving unit has to take place.

In the office action, the Examiner cited Morris as teaching all of the limitations of claim 20 except that "Morris does not explicitly teach operating the second communication channel including synchronizing the second communication channel to the first communication channel." According to the Examiner, this feature is known from the teaching of Hill. The Examiner refers to paragraph [0027] of Hill and states that there is disclosed that "a slave unit on one channel that is participating on two piconets must adjust its clock offset and phase offset to the other channel's clock and phase."

However, it is respectfully submitted that the cited passage of Hill does not disclose the limitation from claim 20 of "determining a synchronization parameter for synchronization of the second communication channel, the synchronization parameter defining a phase offset for data interchange between the master subscriber and each of the first and second slave subscribers via, respectively, the first communication channel and the second communication channel." The citation from Hill relates to channels of one and the same slave unit to two different master units of two different piconets of the Bluetooth system. The two master units of the two different piconets determine the system clocks of piconets. Since the system clocks in the respective piconets are different, the slave unit needs to adjust to the system clock of the piconet (and therefore to the clock of the master unit of the piconet) in which it intends to communicate. During roaming of the slave unit, the slave unit moves from one piconet to another. To communicate within the new piconet, the slave unit needs to adjust its clock to

the system clock of the new piconet. Therefore, contrary to the invention of amended claim 20, Hill addresses the synchronization of only one slave unit to different piconets.

Claim 20, as amended, relates to the synchronization of the communication channels of at least two different slave units within the same piconet. In particular, claim 25, as amended, defines the determination of a synchronization parameter for synchronizing the second communication channel of the second slave unit to the already established first communication channel of the first slave unit within the same piconet. Thereby, the synchronization parameter defines a phase offset for the data interchange via the two communication channels of the two different slave units to the single master unit of the piconet. Hill does not address the situation of synchronizing communication channels of different slave units within the same piconet. Morris was not cited as disclosing, nor does it disclose, synchronizing communication channels of different slave units within the same piconet.

Accordingly, because neither Morris nor Hill teach, show or suggest the limitation of "determining a synchronization parameter for synchronization of the second communication channel, the synchronization parameter defining a phase offset for data interchange between the master subscriber and each of the first and second slave subscribers via, respectively, the first communication channel and the second communication channel," it is respectfully submitted that the rejection of claim 20, as amended, as being obvious over Morris in view of Hill should be withdrawn.

B. Claim 34

Claim 34 was also rejected under 35 U.S.C. § 103(a) as being unpatentable over Morris in view of Hill. Claim 34 has been amended in a similar manner as claim 20 to include the subject matter from cancelled claim 25. In particular, claim 34 has been amended to include the limitation of "the control device being configured to determine synchronization parameters for synchronization of the second communication channel, the synchronization parameters defining a phase offset for data interchange between the master subscriber and each of the first and second slave subscribers via, respectively, the first communication channel and the second communication channel." Therefore, the arguments presented above for the patentability of amended claim 20 are applicable to amended claim 34. Accordingly, for at least those reasons discussed above in connection with claim 20, it is respectfully submitted that the obviousness rejection of claim 34 should be withdrawn.

C. Claims 21, 23, 24, 26-37, 39 and 40

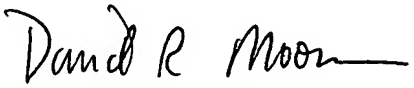
Claims 21, 23, 24, 26-37, 39 and 40 were rejected as allegedly being anticipated or rendered obvious over one or more of the references cited above. Claims 21, 23, 24, 26-37, 39 and 40 depend directly or indirectly from and incorporate all of the limitations of their respective base claims 20 and 34. Accordingly, for at least the same reasons as those set forth above in connection with claims 20 and 34, it is respectfully submitted that the rejection of claims 21, 23, 24, 26-37, 39 and 40 should be withdrawn as well.

V. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicant has made a patentable contribution to the art. Favorable reconsideration and allowance of this application is therefore respectfully requested.

In the event applicant has inadvertently overlooked the need for an extension of time or payment of an additional fee, the applicant conditionally petitions therefore, and authorizes any fee deficiency to be charged to deposit account 13-0014.

Respectfully submitted,



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